

Notice of Allowability

Application No.

10/689,321

Examiner

Lennin R. Rodriguez

Applicant(s)

KEITHLEY ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 10/16/2007.
2. ☒ The allowed claim(s) is/are 1-9 and 18-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |



KING Y. POON

SUPERVISORY PATENT EXAMINER

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Matthew T. Ridsdale on 11/9/2007.

2. The application has been amended as follows:

- (1) The abstract in line 1 change "A **scanning control circuit**" to – A **printer** --;
- (2) In paragraph [0016], line 10, change "step **160**" to – step **170** --;
- (3) In paragraph [0017], line 8, change "step **424**" to – step **426** --;
- (4) In paragraph [0017], line 9, change "step **426**" to – step **428** --.

3. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

- (1) In Figure 1 add reference number "**10**";
- (2) In Figure 5 add reference numbers "**10 A-D**".

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Allowable Subject Matter

4. Claims 1-9 and 18-25 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Claims 1 and 18 are directed to a printer having a laser driver. Claim 1 identifies the uniquely distinct features of "a video controller, bidirectionally connected to the print control engine and the at least one laser driver via a system bus, having a video block that includes, a direct memory access (DMA) controller; a video processor; a first data bus and control bus electrically connecting the DMA controller to the video processor; a video signal generator, connected to the video processor; a second data bus and control bus connecting the video processor to the video signal generator; a frequency synthesizer connected to the video signal generator." The closest prior art Lai et al. (US Patent 5,511,152) teaches the print system 10 is shown to further include a print system controller 18 and a print engine 20. The print system controller 18 further includes a host CPU 22, a printer DMA controller 23, a memory subsystem 24 including memory 25 and memory controller 26, and a printer video interface 27 including a print FIFO 28 having a FIFO data latch 29; either singularly or in combination with other cited references fails to anticipate or render the above underlined limitations obvious (when used with all the claimed limitations).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hiroki Okubo (JP 05-108546 A) discloses When executing the check of the video data and the self- diagnosis of the peripheral element at a CPU 9, serial data transforming video data prepared on a RAM 12 by a FIFO circuit 21, latch 23 and shifter 24 are inputted to a serial/parallel converter 26 synchronously with a band rate clock generated by an oscillator 28 and a frequency divider 29, and parallel data converted there are compared with data written in the FIFO circuit 21 (English abstract). Duffin et al. (US Patent 5,870,535) discloses the data transfers out of RAM to load line segments of single raster lines from individual blocks into the FIFO memory are implemented using a piecewise-linear addressing mode direct memory access (DMA) procedure (column 6, lines 43-47).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lennin R. Rodriguez whose telephone number is (571) 270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lennin Rodriguez
11/10/07

A handwritten signature in black ink, appearing to read 'K. Y. Poon', with a stylized, cursive script.

KING Y. POON
SUPERVISORY PATENT EXAMINER